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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,534	06/24/2003	Jonathan F. Labs	13596-9US CMB/AA/mb 7602	
20988 OGILVY REN	7590 05/30/2007 NAULT LLP		EXAMINER	
1981 MCGILL COLLEGE AVENUE			ROSE, KERRI M	
SUITE 1600 MONTREAL, QC H3A2Y3		ART UNIT	PAPER NUMBER	
CANADA	• •		2616	
			MAIL DATE	DELIVERY MODE
			05/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/601,534	LABS ET AL.				
Office Action Summary	Examiner	Art Unit				
•	Kerri M. Rose	2616				
The MAILING DATE of this communication app						
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period value to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 24 Ju	ine 2003.					
2a) This action is <b>FINAL</b> . 2b) ⊠ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
• • • • • • • • • • • • • • • • • • • •	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 48	53 O.G. 213.				
Disposition of Claims						
4) Claim(s) 1-14 is/are pending in the application.	☑ Claim(s) <u>1-14</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)⊠ Claim(s) <u>9</u> is/are allowed.	☑ Claim(s) <u>9</u> is/are allowed.					
6) Claim(s) <u>1,5-8,10,13 and 14</u> is/are rejected.						
	Claim(s) <u>2-4,11 and 12</u> is/are objected to.					
8) ☐ Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10)⊠ The drawing(s) filed on <u>24 June 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:	priority under 35 U.S.C. § 119(a	)-(d) or (f).				
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority document	• •					
3. Copies of the certified copies of the prio		ed in this National Stage				
application from the International Burea  * See the attached detailed Office action for a list	• • • • • • • • • • • • • • • • • • • •	ed.				
Gee the attached detailed Office action for a list	of the defining dopies not receive					
Attachment(s)	4) 🔲 Interview Summary	( (PTO-413)				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate				
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 2/2/04.	5)  Notice of Informal F	Patent Application				

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1, 5-8, 10, and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Belotserkovsky et al. (US 6,704,374).
- 3. In regards to claim 1, Belotserkovsky discloses a method of synchronizing comprising: determining a quantization bit indicative of said arbitrary power value (figure 4 element 36); correlating said quantization bit with said at least one known coefficient to obtain a correlated signal (fig. 3.68 and column 4 lines 65-67); selecting to select said correlated signal when said correlated signal matches a given criterion (fig. 3.70 and 72); synchronizing said transmitted signal with said at least one known coefficient using said selected correlated signal (col. 5 lines 38-40).
- 4. In regards to claim 5, Belotserkovsky discloses the method of claim 1 further comprising a sequence of known coefficients (col. 4 line 67) and selecting a correlated signal that matches a criterion (col. 5 lines 1-10).
- 5. In regards to claim 6, Belotserkovsky discloses that the criterion is given depending upon the design of the OFDM receiver in column 5 lines 13-16.

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6. In regards to claims 7 and 8, Belotserkovsky discloses the criterion as the maximum value in column 5 line 24.

- 7. In regards to claim 10, Belotserkovsky discloses a synchronizer comprising: a quantizer determining a quantization bit indicative of said arbitrary power value (figure 4 element 36); a correlator to correlate said quantization bit with said at least one known coefficient to obtain a correlated signal (fig. 3.68 and column 4 lines 65-67); a selector to select said correlated signal when said correlated signal matches a given criterion (fig. 3.70 and 72).
- 8. In regards to claim 13, Belotserkovsky discloses the synchronizer of claim 10 further comprising a sequence of known coefficients (col. 4 line 67) and selecting a correlated signal that matches a criterion (col. 5 lines 1-10).

### Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Belotserkovsky et al. (US 6,704,374).
- 11. In regards to claim 14, Belotserkovsky discloses the synchronizer of claim 10 that may be made using hardware (col. 4 line 22). Belotserkovsky does not disclose the hardware is either FPGA or ASIC.

FPGA and ASIC hardware are very well known to one of ordinary skill in the art.

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It would have been obvious to one of ordinary skill in the art to use either FPGA or ASIC as the hardware specified by Belotserkovsky. FPGA is desirable because it can be reprogrammed in the field to fix bugs and often cost less. ASIC is desirable because it can be optimized to perform the necessary functions.

#### Allowable Subject Matter

- 12. Claim 9 is allowed.
- 13. Claims 2-4, 11, and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kerri M. Rose whose telephone number is (571) 272-0542. The examiner can normally be reached on Monday through Thursday, 7:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris H. To can be reached on (571) 272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

kmr

DORIS H. TO SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600